

Setting for component replacement alert for PRIMEQUEST

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This manual describes the method of preliminary notice for the exchange time and the exchange time of the including components which life time is determined (such as UPS BBU and RAID BBU) by using a standard function of each OS.

RAS Support Service is used to monitor the including components which life time is determined for PRIMEQUEST.

But when VMware ESXi 5, OracleVM, Oracle Linux, SUSE Linux or Windows Server 2012(include R2) is used, RAS Support Service cannot be used.

Therefore, please configure the notification of exchange time of the including components which life time is determined that uses a standard function of each OS referring to the following example.

1 Setting example in "VMware"

Here, it explains the setting example of the notification in VMware.

Please set it for VMware on guest OS (Windows Server 2003/2008/2012(include R2) or Red Hat Enterprise Linux).

Please refer to the setting example in the following each OS for a detailed setting method.

*** Notes 1)**

When you will move guest OS under the control of other physical servers by using VMware VMotion, please set the host name etc. beforehand in the notification message with a physical server as you understand whether the including components which life time is determined to be notified is installed on which physical server.

- Example of setting message in VMware

<HostName> It is 365 days till the operating life time of RAID BBU x

<HostName>: Host name of physical server in which the components to be notified is installed

*** Notes 2)**

As for the message output by this setting, remote notification (REMCS/Mail/Trap) is not done.

Please contact Support staff for PRIMEQUEST when you confirm the message output by this setting.

2 Setting example in "OracleVM"

Here, it explains the setting example of the notification in OracleVM.

Please set it for OracleVM on guest OS (Windows Server 2003/2008/2012(include R2) or Linux).

Please refer to the setting example in the following each OS for the details.

*** Notes 1)**

When you will move guest OS under the control of other physical servers, please set the host name etc. beforehand in the notification message with a physical server as you understand whether the including components which life time is determined to be notified is installed on which physical server.

- Example of setting message in OracleVM

<HostName> It is 365 days till the operating life time of RAID BBU x

<HostName>: Host name of physical server in which the components to be notified is installed

*** Notes 2)**

As for the message output by this setting, remote notification (REMCS/Mail/Trap) is not done.
Please contact Support staff for PRIMEQUEST when you confirm the message output by this setting.

3 Setting example in "Oracle Linux"

Here, it explains the setting example of the notification in Oracle Linux 6.4.

Please set it for Oracle Linux referring to the following "8 Setting example when guest OS is "Red Hat Enterprise Linux"" for the details.

4 Setting example in "SUSE Linux"

Here, it explains the setting example of the notification in SUSE Linux 11.

Please set it for SUSE Linux referring to the following "8 Setting example when guest OS is "Red Hat Enterprise Linux"" after executing the following "Preparation before the setting".

[Preparation before the setting]

1. Start the terminal with root privileges.
2. Confirm the "at daemon" is operating by the following commands.
service atd status
- The following messages are displayed when operating.
Checking for at daemon: running
Start the "at daemon" of the following commands when not operating.
service atd start
3. Set for the "at daemon" to start by the automatic operation in the following commands.
chkconfig atd on

5 Setting example in "Windows Server 2012(include R2)"

Here, it explains the setting example of the notification in Windows Server 2012(include R2).

Please set it for Windows Server 2012(include R2) referring to the following "6 Setting example when guest OS is "Windows Server 2008/2012(include R2)"".

6 Setting example when guest OS is "Windows Server 2008/2012(include R2)"

Here, it explains the setting example of the notification in the following way in Windows Server 2008/2012(include R2).

- Record in event log
- Notification of pop up message

The following functions of Windows are used.

- Task Scheduler
- EVENTCREATE command
- MSG command

[Setting example]

1. Windows is logged on with Administrator.
2. Click the [Start] button, click [Control Panel]-[System and Maintenance]-[Administrative Tools], and double-click [Task Scheduler] to run Task Scheduler.
3. Select [Task Scheduler Library], and click [Create Task] from the menu displayed by right-clicking.

4. Select [General] tab.

Input an arbitrary name to the task name, and select [Run whether user is logged on or not] and [Do not store password] in task security options.

5. Select [Triggers] tab, and click [New...] button.

6. Select [One time] radio button, and choose a date and time to trigger the task.

* Please refer to the notification schedule of Table-1 for a specified part of the notified time.

Please specify time zone that the server is operating at the time to trigger the task.

Moreover, check [Enabled].

Click [OK] when the setting is completed.

7. Select [Actions] tab, and click [New...] button.

Here, what action you cause at the scheduled time is specified.

[Setting example when log is recorded in event log]

Please set it like the following examples when you record the log in the event log (application).

Action : Start a program

Program/script : EVENTCREATE

Add arguments :

1) When you notify the level of the event as an Error

- preliminary notice of UPS BBU

/SO F5EP50 /ID 123 /L APPLICATION /T ERROR /D "<message>"

- exchange time of UPS BBU

/SO F5EP50 /ID 124 /L APPLICATION /T ERROR /D "<message>"

- preliminary notice of RAID BBU

/SO F5EP50 /ID 123 /L APPLICATION /T ERROR /D "<message>"

- exchange time of RAID BBU

/SO F5EP50 /ID 124 /L APPLICATION /T ERROR /D "<message>"

* Please refer to the notification message of Table-1 for <message> part.

2) When you notify the level of the event for preliminary notice as Warning and for exchange time as Error.

- preliminary notice of UPS BBU

/SO F5EP50 /ID 123 /L APPLICATION /T WARNING /D "<message>"

- exchange time of UPS BBU

/SO F5EP50 /ID 124 /L APPLICATION /T ERROR /D "<message>"

- preliminary notice of RAID BBU

/SO F5EP50 /ID 123 /L APPLICATION /T WARNING /D "<message>"

- exchange time of RAID BBU

/SO F5EP50 /ID 124 /L APPLICATION /T ERROR /D "<message>"

* Please refer to the notification message of Table-1 for <message> part.

Click [OK] when the setting is completed.

[Setting example when pop up message is notified]

Please set it as follows when you display the pop up message on the screen of Administrator.

Action : Start a program

Program/script : MSG

Add arguments : Administrator /TIME:0 "<message>"

* Please refer to the notification message of Table-1 for <message> part.

Click [OK] when the setting is completed.

8. Select [Conditions] tab.

If [Stop if the computer ceases to be idle condition] and [Restart if idle state resumes] are selected, remove these checks.

9. Select [Settings] tab.

Select [Allow task to be run on demand] and [Run task as soon as possible after a scheduled start is missed].

10. Click [OK] when the setting is completed.

11. Confirms the operation of the task.

Select the task that you want to run. Right-click the task and click [Run].

Please confirm whether the task of setting it is correctly executed.

The log recorded in the event log (application) is actually shown in Table-2.

[Table-1] Notification schedule and message in Windows Server

including components which life time is determined	notification type	notification schedule	notification message
UPS BBU	preliminary notice	in 1 year and 9 months (635 days)	It is 90 days till the operating life time of UPS BBU.
	exchange time	in 2 years (730 days)	UPS BBU exceeded the operating life.
RAID BBU	preliminary notice	in 2 years (730days)	It is 365 days till the operating life time of RAID BBU x.
	exchange time	in 3 years (1095 days)	RAID BBU x exceeded the operating life.

* RAID BBU x: When two or more RAID BBU are installed, registration to the server is done in the order of suffix number of RAID BBU. So, RAID BBU 1 is registered at the higher order than RAID BBU 2.

[Table-2] Log recorded in event log (Application) in Windows Server

source	event ID	level	message	Note
F5EP50	123	Error (or Warning)	It is 90 days till the operating life time of UPS BBU.	preliminary notice of UPS BBU
	124	Error	UPS BBU exceeded the operating life.	exchange time of UPS BBU
	123	Error (or Warning)	It is 365 days till the operating life time of RAID BBU x.	preliminary notice of RAID BBU
	124	Error	RAID BBU x exceeded the operating life.	exchange time of RAID BBU

* RAID BBU x: When two or more RAID BBU are installed, registration to the server is done in the order of suffix number of RAID BBU. So, RAID BBU 1 is registered at the higher order than RAID BBU 2.

7 Setting example when guest OS is "Windows Server 2003/2003 R2"

Here, it explains the setting example of the notification in the following way in Windows Server 2003/2003 R2.

- Record in event log
- Notification of pop up message

The following functions of Windows are used.

- Task Scheduler
- EVENTCREATE command
- MSG command

[Setting example]

1. Windows is logged on with Administrator.
2. Click on the [Start] Button, Select [Programs] (or [All Programs]) - [Accessories] - [System Tools] - [Scheduled Tasks].
3. In the Scheduled Tasks window, click [File] - [New] - [Scheduled Task].
A New Task icon appears. The title is in Edit mode so that you can immediately enter a name for the new task.
4. Double-click new task to open the task's Properties dialog box.
5. Select [Task] tab.
Here, what action you cause at the scheduled time is specified.

[Setting example when log is recorded in event log]

Please set it like the following examples when you record the log in the event log (application).

Run:

- 1) When you notify the level of the event as an Error

- preliminary notice of UPS BBU

```
EVENTCREATE /SO F5EP50 /ID 123 /L APPLICATION /T ERROR /D "<message>"
```

- exchange time of UPS BBU

```
EVENTCREATE /SO F5EP50 /ID 124 /L APPLICATION /T ERROR /D "<message>"
```

- preliminary notice of RAID BBU

```
EVENTCREATE /SO F5EP50 /ID 123 /L APPLICATION /T ERROR /D "<message>"
```

- exchange time of RAID BBU

```
EVENTCREATE /SO F5EP50 /ID 124 /L APPLICATION /T ERROR /D "<message>"
```

* Please refer to the notification message of Table-1 for <message> part.

- 2) When you notify the level of the event for preliminary notice as Warning and for exchange time as Error.

- preliminary notice of UPS BBU

```
EVENTCREATE /SO F5EP50 /ID 123 /L APPLICATION /T WARNING /D "<message>"
```

- exchange time of UPS BBU

```
EVENTCREATE /SO F5EP50 /ID 124 /L APPLICATION /T ERROR /D "<message>"
```

- preliminary notice of RAID BBU

```
EVENTCREATE /SO F5EP50 /ID 123 /L APPLICATION /T WARNING /D "<message>"
```

- exchange time of RAID BBU

```
EVENTCREATE /SO F5EP50 /ID 124 /L APPLICATION /T ERROR /D "<message>"
```

* Please refer to the notification message of Table-1 for <message> part.

Confirm the Enabled (scheduled task runs at specified time) check box is selected.

[Setting example when pop up message is notified]

Please set it as follows when you display the pop up message on the screen of Administrator.

Run: MSG Administrator /TIME:0 "<message>"

* Please refer to the notification message of Table-1 for <message> part.

Confirm the [Enabled (scheduled task runs at specified time)] check box is selected.

6. Select [Schedule] tab.

Select [One time], and choose a date and time to trigger the task.

* Please refer to the notification schedule of Table-1 for a specified part of the notified time.

Please specify time zone that the server is operating at the start time.

7. Select [Settings] tab.

If [Don't start the task if the computer is running on batteries] and [Don't start the task if the computer is running on batteries] are selected, remove these checks.

8. Click [OK] when the setting is completed.

If the setting of account information window is shown, enter the password for Administrator and click [OK].

9. Confirms the operation of the task.

Select the task that you want to run. Right-click the task and click [Run].

Please confirm whether the task of setting it is correctly executed.

The log recorded in the event log (application) is actually shown in Table-2.

*** Reference ***

- EVENTCREATE command

The EVENTCREATE is a command of the Windows standard to write an arbitrary log in OS event log.

The meaning of each option is as follows.

/SO : The source to use it for the event is specified.

/ID : Event ID is specified. Please specify an arbitrary value within the range of 1-1000.

/L : The kind of the event log is specified. (ex. APPLICATION, SYSTEM)

/T : The type (level) of the event log is specified. (ex. ERROR, WARNING, INFORMATION)

/D : The explanation written in the event log is specified.

Help can be referred to by inputting from the command prompt as "EVENTCREATE /?" for detailed use.

- MSG command

The MSG is a command of the Windows standard that transmits the pop up message to the random user.

The 1st parameter: The user in the destination is specified.

It is notified by all users who are logging it on when "*" is specified.

The 2nd parameter: /TIME:0 specifies that pop up is displayed indefinitely.

The 3rd parameter: The displayed message is specified.

Help can be referred to by inputting from the command prompt as "MSG" for detailed use.

8 Setting example when guest OS is "Red Hat Enterprise Linux"

Here, it explains the setting example of the notification in the following way in Red Hat Enterprise Linux.

- Record of log in syslog (/var/log/messages)

The following functions of Linux are used.

- at command

- logger command

- syslog (/var/log/messages)

[Setting example]

1. Start the terminal with root privileges.

2. Time and the content where the log is recorded with "at" are set. Please execute the command like the

following example.

[Execution example]

```
# at now + 730 days
```

```
at> logger -i -p user.alert -t RASStatusCheck <message>
```

```
at> <EOT>    <- Please push [Ctrl]+[d]
```

In the above example the <message> is recorded in syslog (/var/log/messages) in two years. The explanation of "at" can be referred to by the "man 1 at" command for a detailed setting method of "at".

* Please refer to the notification schedule of Table-3 for a specified part of the notified time.

* Please refer to the notification message of Table-3 for <message> part.

[Table-3] Notification schedule and message in Red Hat Enterprise Linux

including components which life time is determined	notification type	notification schedule	notification message
UPS BBU	preliminary notice	in 1 year and 9 months (635 days)	It is 90 days till the operating life time of UPS BBU.
	exchange time	in 2 years (730 days)	UPS BBU exceeded the operating life.
RAID BBU	preliminary notice	in 2 years (730days)	It is 365 days till the operating life time of RAID BBU 1.
	exchange time	in 3 years (1095 days)	RAID BBU 1 exceeded the operating life.

* RAID BBU x: When two or more RAID BBU are installed, registration to the server is done in the order of suffix number of RAID BBU. So, RAID BBU 1 is registered at the higher order than RAID BBU 2.

[Table-4] Log recorded in syslog(/var/log/messages) in Red Hat Enterprise Linux

Facility	priority	message	note
User	alert	RASStatusCheck[%d]:It is 90 days till the operating life time of UPS BBU.	preliminary notice of UPS BBU
		RASStatusCheck[%d]:UPS BBU exceeded the operating life.	exchange time of UPS BBU
		RASStatusCheck[%d]:It is 365 days till the operating life time of RAID BBU x.	preliminary notice of RAID BBU
		RASStatusCheck[%d]:RAID BBU x exceeded the operating life.	exchange time of RAID BBU

* RAID BBU x: When two or more RAID BBU are installed, registration to the server is done in the order of suffix number of RAID BBU. So, RAID BBU 1 is registered at the higher order than RAID BBU 2.

* [%d] : Process ID of execution command (logger).

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